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A QUALITY PROCESS APPROACH TO ELECTRONIC SYSTEM RELIABILITY: Supplier Quality Assessment Procedure

McDonnell Douglas Aerospace and Hughes Radar Systems Group

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13. ABSTRACT (Medinum 200 words)

This handbook defines a new approach to reliability assurance and control based on principles of Total Quality Management. The new approach is process oriented with the elements of the process tailored to each DoD acquisition phase. The handbook provides, for each acquisition phase, a time phased description of all critical activities necessary for reduction and elimination of all potential product and process defects. For each critical activity, relevent inputs, outputs, customers and suppliers are defined. Elements required to attack all sources of defects are combined in the process with linkages across the diverse functional specialties required to implement a coordinated concurrent engineering process. Tracking metrics are recommended and defined for each DoD acquisition phase. The new process outlined in the handbook requires a pre-award supplier quality assessment. Volume II contains criteria and procedures for supplier quality assessment, certification and audit. The procedures parallel the highly accepted Malcolm Baldrige Award Criteria. They define a scoring system, a methodology and a set of detailed evaluation sheets with scoring instructions included. DoD Program Managers can use the handbook set for the construction of Requests For Proposals, Instructions to Offerors, Statements of Work, and Evaluation Criteria for electronic systems procurement. DoD contractors and commercial developers

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can use the information for subcontract documents and the development of internal processes that implement the contents of the handbook. Both DoD and industry management can use the handbook contents for the development of design reviews and systems engineering event criteria in order to track and control programs.

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EXECUTIVE SUMMARY

This volume (Volume II of II) confirms procedures for conducting a supplier evaluation to determine if the enterprise wide commitment to quality design and manufacturing processes is sufficient to ensure reliable products. This evaluation should be done as part of the proposal and source selection process for any significant contract during any DoD acquisition phase.

The first section of this volume defines the applicability of the procedures for Quality evaluation and provides a summary of the procedure's content. Section Two defines the scoring system to be used to quantify a supplier's commitment to quality processes. Section Three summarizes each scoring category and the elements that comprise that category.

Appendix A to this volume is a set of detailed evaluation sheets with instructions provided for scoring every element of the quality evaluation.

1.0 INTRODUCTION

The Certification and Audit Process (CAP) described within this document is a vehicle by which the government or a defense contractor can evaluate the continuing health of a contractor's or supplier's system for delivering reliable, high quality products. The word "Quality" is used extensively throughout this document. It describes a broad range of activities directed at customer satisfaction and is not restricted to specific organizations or traditional definitions.

The process utilizes the Malcolm Baldrige National Quality Award as a model. Procedures are provided to allow certification at three levels of conformance to the philosophies outlined in the Malcolm Baldrige criteria. The procedures can also be utilized for self-assessment, to provide an opportunity for cross-fertilization of ideas, and to serve to routinely refocus the organization on reliability and quality. Using the formally documented CAP worksheets and review procedures as shown in Appendix A, a review team is able to recognize achievements, point out shortcomings and opportunities, and offer recommendations for continuous improvement.

It is intended, under these procedures, that companies become certified in order to continue providing goods and services to their customers. Source selection should consider a company's history of customer satisfaction and the ability to deliver a high quality product that meets customer requirements, as well as their level of certification. Each company should strive for continuous improvement; certification allows formal recognition of those companies that have demonstrated a willingness to achieve higher levels of institutionalizing quality in all company processes.

1.1 APPLICATION TO PRIME CONTRACTORS

It is intended that the CAP be administered by a cross functional team of four to eight (depending on the size of the company to be evaluated) personnel who have been trained as examiners. The team would arrive at a consensus score for the company being evaluated. Completing the CAP would typically require one week. Ideally, the on-site

CONTINUOUS

CERTIFIED SUPPLIERS

TRAINING THE EXAMINERS

evaluation for government contractors would be performed by a single government sponsored third party evaluation panel whose examiners have been trained by an agency such as the Quality Management Branch of the Office of Management and Budget. This agency evaluates the nominations for the Quality Improvement Prototype (QIP) Award and performs site visits to select the QIP winners. It also utilizes similar evaluation criteria as the Commerce Department utilizes in evaluating applicants for the Malcolm Baldrige National Quality Award. The QIP was developed as a counterpart to the Malcolm Baldrige award to recognize government agencies for their quality improvement efforts. The Quality Management Branch of the Office of Management and Budget is suggested as a focal point for the CAP because it already represents the government in determining QIP award recipients.

The level of certification awarded, the CAP score, CAP assessment, and feedback is considered proprietary, competition sensitive, and would be provided to government customers upon written request and approval by the affected contractor. This information could then be used in source selection and program administrative decisions.

1.2 APPLICATION TO SUPPLIERS TO PRIME CONTRACTORS

For suppliers to government contractors, it is envisioned that the evaluation would be conducted by a single third party evaluation panel, whose examiners have been trained in the evaluation criteria. The supplier's CAP score, CAP assessment, and feedback is considered proprietary, competition sensitive, and would be provided to customers upon written request and approval by the affected supplier. This information could then be used in source selection and program administrative decisions.

Since most defense contractors have a large number of suppliers, it is not economically feasible to require evaluation of 100% of all suppliers. Therefore, it is recommended that primary consideration be given to initially evaluate the top 20% of suppliers that provide 80% of the value of goods and services to the contractor.

PRINCIPAL SUPPLIERS

The procedure for certification of suppliers would emulate the procedures envisioned by SEMATECH. a consortium of American semiconductor companies who have entered into an agreement called "Partnering for Total Quality." SEMATECH envisions having an independent third party perform the on-site visit to evaluate and certify suppliers. The independent evaluation would be funded jointly by all contractors belonging to SEMATECH. All members of SEMATECH agree to utilize the results of the independent third party assessment rather than to perform their own on-site evaluations. This procedure will greatly reduce the number of on-site evaluations for each supplier. It also reduces the costs associated with these numerous evaluations for both the contractors and suppliers. The quality of the evaluations would also improve because the independent third party would employ a professional evaluation team thoroughly trained and adept at performing these assessments.

No current regulations require changing to accommodate the above procedures.

1.3 USE FOR SELF-ASSESSMENT

For self-assessment purposes, the CAP would provide the most benefit if administered on a biennial basis by a cross functional team of four to five high level management experts from diverse parts of the company.

1.4 USE FOR CERTIFICATION

For certification purposes, the CAP could be utilized to certify the initial level of compliance to the philosophies of the Malcolm Baldrige criteria. The company under evaluation would submit their selfassessment evaluation to the evaluating organization prior to the certification visit. The reviewing team would utilize the company's self-assessment to develop an image of the company's perception of its own performance. The reviewing team's assessment during the site visit would include a comparison of the company's evaluation with the reviewing teams assessment. After the certification is completed, the company under evaluation would send it's biennial self-assessment to the evaluating organization for proof of continuous improvement. When the company's self-assessment indicates achievement

BASELINE FOR CONTINUOUS IMPROVEMENT

of the next higher level of certification, the evaluating organization could again, by request of the affected company, administer the CAP to certify the higher level of conformance.

1.5 USE FOR AUDITING

For auditing purposes, the evaluating organization would administer the CAP to initially certify the level of compliance, and then on a two to three year cycle to verify the self-assessments being submitted by the company under evaluation.

1.6 SUMMARY OF PROCEDURES

For the on-site evaluation, the team of examiners will utilize the same type of process as the on-site evaluation conducted for the QIP and the Malcolm Baldrige award. The team will interview a cross section of the company using a series of questions covering the seven categories identified in the Malcolm Baldrige National Quality Award criteria. The Certification and Audit Process was developed using the Baldrige criteria, modified for application to the defense industry. The differences between the CAP procedures and the Malcolm Baldrige procedures are:

- (1) Item 1.4 Public Responsibility, in Category 1.0 Leadership, of the 1991 Malcolm Baldrige National Quality Award was not included in the CAP procedures. Even though this Item is important, it was deemed not relevant to certification for a defense contractor.
- (2) The Malcolm Baldrige award process does not include certification procedures. The CAP contains certification procedures to allow certification to one of three levels depending upon the score achieved.
- (3) The Malcolm Baldrige award process depends upon highly skilled and trained evaluators who subjectively evaluate how well the applicant successfully accomplishes various areas to address under each category and item to be evaluated. The CAP process recognizes that the same level of skill and training for evaluators will not be possible to achieve as with the Baldrige examiners. The CAP procedures

MODIFIED MALCOLM BALDRIGE AWARD CRITERIA takes this into consideration by providing a series of questions to be scored for each item within the categories of the Malcolm Baldrige examination criteria. The questions are included in worksheets to assist the CAP examiners throughout their evaluation. The CAP process attempts to make the evaluation more of an objective evaluation and less dependent upon the subjectiveness of the evaluators.

These procedures should not duplicate existing certification and audit procedures that have already been implemented or completed. Wherever possible, preference should be given to utilizing information contained in existing assessments.

1.7 FRAMEWORK OF THE CAP

The Certification and Audit Process consists of a three-level framework that is modeled after the Malcolm Baldrige National Quality Award. The three levels of the framework are: (1) Examination Categories; (2) Examination Items; and (3) Questions which cover specific areas to address. The maximum points available for all seven Categories is 1000.

1.7.1 EXAMINATION CATEGORIES

The following seven categories represent the major components of a company's management system. Each category is assigned a maximum point value (shown in Table 1-1). The seven categories are:

- 1.0 Leadership
- 2.0 Information and Analysis
- 3.0 Strategic Planning
- 4.0 Human Resource Utilization
- 5.0 Assurance of Quality Products and Services
- 6.0 Results
- 7.0 Customer Satisfaction

1.7.2 EXAMINATION ITEMS

Each examination category contains two or more examination items. There are a total of 31 examination items among the seven categories. Each item focuses on a major element of an effective defect reduction system. Each item is assigned a point value. These are provided in Table 1-1.

FLOWDOWN OF REQUIREMENTS

	TABLE 1-1 Certification and Audit Procedure Examination Categories, Items, and Poir	nt Values	
	Examination Categories and Items		m Points
1.0	Leadership		100
	1.1 Senior Executive Leadership	50	
	1.2 Quality Values	20	
	1.3 Management for Quality	30	
2.0	Information and Analysis		70
	2.1 Scope and Management of Data and Information	20	
	2.2 Competitive Comparisons and Benchmarks	30	1
	2.3 Analysis of Data and Information	20	
3.0	Strategic Planning		60
	3.1 Strategic Quality Planning Process	35	
	3.2 Quality Goals and Plans	25	
4.0	Human Resource Utilization		150
	4.1 Human Resource Management	20	
	4.2 Employee Involvement	40	
	4.3 Education and Training	40	
	4.4 Employee Recognition and Performance Measurement	25	
	4.5 Employee Well-Being and Morale	25	
5.0	Assurance of Quality Products and Services		140
	5.1 Design and Introduction of Quality Products and Services	35	
	5.2 Process Quality Control	20	<u> </u>
	5.3 Continuous Improvement of Processes	20	<u> </u>
	5.4 Quality Assessment	15	
	5.5 Documentation	10	
	5.6 Business Process and Support Service Quality	20	
	5.7 Supplier Quality	20	
6.0	Results		180
	6.1 Product and Service Quality Results	90	
	6.2 Business Process, Operational, and Support Service Quality Results	50	
	6.3 Supplier Results	40	1
7.0	Customer Satisfaction		300
	7.1 Determining Customer Requirements and Expectations	30	
	7.2 Customer Relationship Management	50	Ì
	7.3 Customer Service Standards	20	
•••	7.4 Commitment to Customers	15	
	7.5 Complaint Resolution for Quality Improvement	25	Î
	7.6 Determining Customer Satisfaction	20	
	7.7 Customer Satisfaction Results	70	
	7.8 Customer Satisfaction Comparison	70	

1.7.3 ITEM QUESTIONS

Each examination item includes a set of questions which cover specific areas to address. The questions serve to illustrate and clarify the intent of the Items and to place limits on the types and amounts of information to review.

During the review process, the review team compares the companies present system to an ideal system visualized in the Malcolm Baldrige criteria. Previous programs have been focused on "compliance to military standards" rather than on the results desired by the customer. An innovative approach to achieving customer satisfaction, which shows results, is always preferred to the traditional approach (blind compliance to Mil Specs) that may show poor or inconsistent results. Since no two companies are the same, no two Quality Systems will be exactly the same; yet both systems may be acceptable as long as the results satisfy the customer.

1.8 CERTIFICATION LEVELS

The results are summarized into "Strengths,"
"Opportunities for Improvement," and a total CAP
score. These are presented to the company before
leaving the facility. One of the following three
certification levels can be awarded to the company:

1.8.1 LEVEL I SUPPLIER

A Level I Supplier is a company that has demonstrated a willingness to improve the quality and reliability of its products and services by beginning on the path of continuous improvement.

1.8.2 LEVEL II SUPPLIER

A Level II Supplier is a company who has demonstrated significant progress in implementing a continuous improvement program.

1.8.3 LEVEL III SUPPLIER

A Level III Supplier is the most difficult level to achieve. It indicates a partnership between the company and the evaluating organization, and signifies a company that has made dramatic strides in implementing its continuous improvement program.

COMMITMENT TO QUALITY

1.9 CERTIFICATION PROCEDURES

Table 1-2 defines the minimum CAP score requirements to achieve each certification level. The minimum score was developed from information obtained from the Malcolm Baldrige Award Committee. Mr. Curt Reiman, Senior Executive of the Malcolm Baldrige Award, National Institute of Standards and Technology, states: "It is projected that the average company in the United States would score roughly between 100 and 200 points on the Baldrige scale." Based upon this information, the minimum certification level score was set as the average of the range that the average company in the United States is projected to score.

For the company, the benefits of certification will be improvements in both internal and external processes which, in turn, result in higher quality products and services. Following the flow of the Deming Chain Reaction, quality will improve and operating costs will be reduced due to less rework and scrap.

CAP C	TABLE 1-2 CAP Certification and Score Requirements						
Cert Level	Minimum Score Required						
Level I	Total score of 150 or above with no overall category average less than 12.5% of the available category score.						
Level II	Total score of 350 or above with no overall category average less than 25% of the available category score.						
Level III	Total score of 500 or above with no overall category average less than 35% of the available category score.						

Advancing through the Certification and Audit Process will mean developing a closer working relationship (partnership) with the evaluating organization. The CAP can be utilized as a basis to reduce the number of suppliers. This, in turn, will reduce the administrative burden of the contracting agency, and be very beneficial to those suppliers who are retained due to their higher quality performance.

SCORING QUALITY LEVELS

It is intended that if a company scores below 150 points, they cannot be certified and should not be allowed to do business with the government or the government contractor.

2.0 THE SCORING SYSTEM

APPROACH, DEPLOY-MENT, AND RESULTS

The scoring system is patterned after the Malcolm Baldrige National Quality Award scoring system. It is based upon three evaluation dimensions: (1) approach; (2) deployment; and (3) results. The following paragraphs describe the three dimensions.

2.1 APPROACH

"Approach" refers to the methods the company uses to achieve the purposes addressed in the questions. The scoring criteria used to evaluate the approaches include one or more of the following:

- the degree to which the approach is prevention based
- the appropriateness of the tools, techniques, and methods to the requirements
- the effectiveness of the tools, techniques, and methods
- the degree to which the approach is systematic, integrated, and consistently applied
- the degree to which the approach embodies effective evaluation/improvement cycles
- the degree to which the approach is based upon quantitative information that is objective and reliable
- the indicators of unique and innovative approaches, including significant and effective new
 adaptations of tools and techniques used in other
 applications or types of businesses

2.2 DEPLOYMENT

"Deployment" refers to the extent to which the approaches are applied to all relevant areas and activities addressed and implied in the questions. The scoring criteria used to evaluate servicement

include one or more of the following:

- the appropriate and effective application to all product and service characteristics
- the appropriate and effective application to all transactions and interactions with customers and suppliers of goods and services
- the appropriate and effective application to all internal processes, activities, facilities, and employees

2.3 RESULTS

"Results" refers to outcomes and effects in achieving the purposes addressed and implied in the questions. The scoring criteria used to evaluate results include one or more of the following:

- · the quality levels demonstrated
- the contributions of the outcomes and effects to improvement in defect reduction
- · the rate of defect reduction improvement
- the breadth of defect reduction improvement
- · the demonstration of sustained improvement
- the significance of improvements to the company's business
- the comparison with industry and world leaders
- the company's ability to show that improvements derive from their quality practices and actions

Table 2-1 describes the scoring guidelines for the Certification and Audit Process.

The three dimensions (Approach, Deployment, and Results) will not normally apply to every question within each item. The dimension(s) applicable to each question are provided on the Item Worksheets. In cases where more than one dimension is applicable to a question, each of the dimensions is evaluated. A weighting factor has been provided for each question. The rating factor score times the weighting

SCORING DETAILS

		TABLE 2-1	
		COLET CLUCKING IN CAL	
Hating Factor Score	Approach (A)	Deployment (D)	Results (R)
(o)	No system or process in evidence.	None.	Ineffective.
	No management recognition of need.		٠
(6)	Beginnings of systematic prevention	Fragmented.	Inconsistent but some positive trends
		Deployed in some areas of the company.	
	Management has begun to recognize the		
	need and has begun to provide support in some green.		
(5)	A sound evaluation of a property of the proper	Consistent source most maint areas	Profile mass rable reside in most
E	evidence of some prevention based	of the company and some support areas.	major areas.
	activities.	:	
	Some management becoming procedive		Some evidence that results are caused by accomed-
	Evidence of eliminating organizational		
1	disconnects.		
S 	Sound, systematic prevention basis with	Consistent across all major areas of	Documented evidence that efforts are
	evidence of refinement, improvement,	the company and many support areas.	successful in major areas.
			Al requirements are fulfilled.
_	Majority of management is proactive.		
	Good Internation		Demonstrated positive and sustained
	5		
(<u>6</u>)	Exceptionally well defined innovetive	Pervesive and consistent across all areas	Recuirements exceeded
<u></u>	system/process that anticipates	areas of the company, including support	
	customer needs.	areas.	World class results in major areas.
	Management provides zealous		Excellent results in all other areas.
	resource of po		Results clearly caused by approach.
	Recognized even outside the company.		Sustained results.
			Courses except by others
			Contract construction of the said.

factor provides the dimension score for each question. The sum of the question scores provides the total Item Score. The Item Scores are transferred to the Category Summary Worksheets. The sum of the Item Scores provide the total Category Scores. These Category Scores are transferred to the Certification and Audit Worksheet. The sum of the Category Scores provides the total CAP score. A percent score achieved for each category is also calculated.

Each Item (e.g., Senior Executive Leadership, Quality Values, Management for Quality) contains a series of questions whose answers are to be evaluated and scored. One of these questions is identified as a "supplemental" question. These questions are intended to permit credit for data that is germane to evaluating the Item but not otherwise specifically covered by the other Item questions. The supplemental questions are scored in the same manner as all other questions. However, the summed total score for an Item, including the value given to the supplemental question, cannot exceed the maximum Item score.

3.0 EXAMINATION CATEGORY DETAILS

EVALUATION DETAILS

This section describes the focus of each Category and Items to be reviewed for the Certification and Audit Process.

3.1 LEADERSHIP (100 POINTS)

The Leadership category examines how senior executives create and sustain clear and visible quality values along with a management system to guide all activities of the company toward quality excellence.

3.1.1 SENIOR EXECUTIVE LEADERSHIP (50 POINTS)

Examines the senior executives' leadership, personal involvement, and visibility in developing and maintaining an environment for quality excellence.

3.1.2 QUALITY VALUES (20 POINTS)

Examines the company's values, how they are projected in a consistent manner, and how adoption of the values throughout the company is determined

and reinforced.

3.1.3 MANAGEMENT FOR QUALITY (30 POINTS)

Examines how the quality values are integrated into day-to-day leadership, management, and supervision of all company units.

3.2 INFORMATION AND ANALYSIS (70 POINTS)

The Information and Analysis category examines the scope, validity, use, and management of data and information that underlie the company's overall quality management system. Also examined is the adequacy of the data, information, and analysis to support a responsive, prevention-based approach to customer satisfaction built upon "management by fact."

3.2.1 SCOPE AND MANAGEMENT OF DATA AND INFORMATION (20 POINTS) -

Examines the company's base of data and information used for planning, day-to-day management and evaluation of quality improvement efforts, and how data and information reliability, timeliness, and access are assured.

3.2.2 COMPETITIVE COMPARISONS AND BENCHMARKS (30 POINTS) - Examines the company's approach to selecting quality-related competitive comparisons and world-class benchmarks to support planning, evaluation, and improvement.

3.2.3 ANALYSIS OF DATA AND INFORMATION (20 POINTS)

Examines how data and information are analyzed to support the company's overall quality objectives.

3.3 STRATEGIC PLANNING (60 POINTS)

The Strategic Planning category examines the company's planning process for achieving or retaining quality leadership and how the company integrates quality improvement planning into overall business planning. Also examined are the company's short-term and longer-term plans to achieve and/or sustain a quality leadership position.

3.3.1 STRATEGIC QUALITY PLANNING PROCESS (35 POINTS)

Examines the company's strategic planning process for short-term (1-2 years) and longer-term (3 years or more) quality leadership and customer satisfaction.

3.3.2 QUALITY GOALS AND PLANS (25 POINTS)

Examines the company's goals and strategies and the principal quality plans for the short-term (1-2 years) and longer-term (3 years or more).

3.4 HUMAN RESOURCE UTILIZATION (150 POINTS)

The Human Resource Utilization category examines the effectiveness of the company's efforts to develop and realize the full potential of the work force, including management, and to maintain an environment conducive to full participation, leadership, and personal and organizational growth.

3.4.1 HUMAN RESOURCE MANAGEMENT (20 POINTS)

Examines how the company's overall human resource management effort supports its quality objectives.

3.4.2 EMPLOYEE INVOLVEMENT (40 POINTS)

Examines the means available for all employees to contribute effectively to meeting the company's quality objectives; examines trends and current levels of involvement.

3.4.3 EDUCATION AND TRAINING (40 POINTS)

Examines how the company decides what quality education and training is needed by employees and how it utilizes the knowledge and skills acquired; examines the types of defect reduction education and training received by employees in all employee categories.

3.4.4 EMPLOYEE RECOGNITION AND PERFORMANCE MEASUREMENT (25 POINTS)

Examines how the company's recognition and performance measurement processes support quality objectives; examines trends in recognition.

3.4.5 EMPLOYEE WELL-BEING AND MORALE (25 POINTS)

Examines how the company maintains a work environment conducive to the well-being and growth of all employees; examines trends and levels in key indicators of well-being and morale.

3.5 ASSURANCE OF QUALITY PRODUCTS AND SERVICES (140 POINTS)

The Assurance of Quality Products and Services category examines the systematic approaches used by the company for assuring reliability and quality of goods and services based primarily upon process design and control, including control of procured materials, parts, and services. Also examined is the integration of process control with continuous quality improvement.

3.5.1 DESIGN AND INTRODUCTION OF RELIABLE PRODUCTS AND SERVICES (35 POINTS)

Examines how new and/or improved products and services are designed and introduced and how processes are designed to meet key product and service reliability and quality requirements.

3.5.2 PROCESS QUALITY CONTROL (20 POINTS)

Examines how the processes used to produce the company's products and services are controlled.

3.5.3 CONTINUOUS IMPROVEMENT OF PROCESSES (20 POINTS)

Examines how processes used to produce products and services are continuously improved.

3.5.4 QUALITY ASSESSMENT (15 POINTS) Examines how the company assesses the reliability and quality of its systems, processes, practices, products, and services.

3.5.5 DOCUMENTATION (10 POINTS) Examines documentation and other modes of

knowledge preservation and knowledge transfer to support reliability and quality assurance, assessment, and improvement.

- 3.5.6 BUSINESS PROCESS AND SUPPORT SERVICE QUALITY (20 POINTS) Examines process quality, quality assessment, and quality improvement activities for business processes and support services.
- 3.5.7 SUPPLIER QUALITY (20 POINTS)
 Examines how the reliability and quality of materials, components, and services furnished by suppliers is assured, assessed, and improved.

3.6 RESULTS (180 POINTS)

The Results category examines quality levels and improvement based upon objective measures derived from both analysis of customer requirements and expectations, and from analysis of business operations.

3.6.1 PRODUCT AND SERVICE QUALITY RESULTS (90 POINTS)

Examines trends in current reliability and quality levels for key product and service features; examines the company's knowledge of its current levels with those of competitors and world leaders.

3.6.2 BUSINESS PROCESS, OPERATION-AL, AND SUPPORT SERVICE QUALITY RESULTS (50 POINTS)

Examines trends in quality improvement and current quality levels for business processes, operations, and support services.

3.6.3 SUPPLIER RESULTS (40 POINTS)

Examines trends and levels in quality of supplies and services furnished by other companies; examines the company's knowledge of its supplier quality with that of competitors and with key benchmarks.

3.7 CUSTOMER SATISFACTION (300 POINTS)

The Customer Satisfaction category examines the company's knowledge of the customer, overall customer service systems, responsiveness, and its ability to meet requirements and expectations. Also examined are current levels and trends in customer satisfaction.

RESULTS AND
CUSTOMER SATISFACTION DRIVE THE
EVALUATION

3.7.1 DETERMINING CUSTOMER REQUIRE-MENTS AND EXPECTATIONS (30 POINTS)

Examines how the company determines current and future customer requirements and expectations.

3.7.2 CUSTOMER RELATIONSHIP MANAGEMENT (50 POINTS)

Examines how the company provides effective management of its relationships with its customers and uses information gained from customers to improve products and services as well as its customer relationship management practices.

3.7.3 CUSTOMER SERVICE STANDARDS (20 POINTS)

Examines the company's standards governing the direct contact between its employees and customers and how these standards are set and modified.

3.7.4 COMMITMENT TO CUSTOMERS (15 POINTS)

Examines the company's commitments to customers on its explicit and implicit promises underlying its products and services.

3.7.5 COMPLAINT RESOLUTION FOR QUALITY IMPROVEMENT (25 POINTS)

Examines how the company handles complaints, resolves them, and uses complaint information for quality improvement and for prevention of recurrence of problems.

3.7.6 DETERMINING CUSTOMER SATISFACTION (20 POINTS)

Examines the company's methods for determining customer satisfaction, how satisfaction information is used in quality improvement efforts, and how methods for determining customer satisfaction are improved.

3.7.7 CUSTOMER SATISFACTION RESULTS (70 POINTS)

Examines trends in the company's customer satisfaction and in indicators of adverse customer response.

3.7.8 CUSTOMER SATISFACTION COMPARISON (70 POINTS)

Examines the company's comparison of its customer satisfaction results and recognition with those of competitors that provide similar products and services.

REFERENCES

- 1 "1991 Application Guidelines Malcolm Baldrige National Quality Award," United States Department of Commerce, National Institute of Standards and Technology, Route 270 and Quince Orchard Road, Administration Building, Room A537, Gaithersburg, MD 20899.
- 2 "1991 Quality Improvement Prototype Award," Quality Management Branch, Room 6235, Office of Management and Budget, 725 17th Street, N.W., Washington, DC 20503, 1990.
- 3 "Partnering for Total Quality," SEMATECH, 2706 Montopolis Drive, Austin, TX 78741, (521)356-3500, 1990.
- 4 "1991 Application Guidelines, Malcolm Baldrige National Quality Award," United States Department of Commerce, National Institute of Standards and Technology.
- 5 "Motorola Corporate Quality System Review Guidelines," Motorola, Inc., March 1991.
- 6 "Vendor Certification Program" The Wallace Company, Inc., 1991.
- 7 J.P. Russell, "Quality Management Benchmark Assessment," ASQC Quality Press, 1991.
- 8 M.G. Brown, "How to Interpret the Malcolm Baldrige Criteria," ASQC Quality Press, 1991.
- 9 "The MDC Preferred Supplier Certification Process," McDonnell Douglas Corporation, 1991.
- 10 "National Electronic Process Certification Standard, SP-2768," Draft Standard of the Electronic Industries Association, July 1991.

11 "1991 Application Guidelines, Malcolm Baldrige National Quality Award," United States Department of Commerce, National Institute of Standards and Technology.

APPENDIX A CERTIFICATION AND AUDIT WORKSHEETS

DAT CAT ITE	EGORY: 1.0 Leadership M: 1.1 Senior Executive Leadership	RATING FACTOR (F)					WEIGHT FACTOR	SCORE
No.	QUESTION	0	3	5	7	10	(W)	(FxW)
1.	Has senior management developed and published a mission and vision statement? Approach:						1.0	
2.	Has senior management developed and published a quality policy that focuses on continuous improvement? Approach:						1.0	
3.	Is there evidence that senior management is committed to the policy by their personal participation in planning activities, employee recognition, attendance in education courses, and periodic reviews? Approach:						1.0	
4.	Is there evidence that employees are aware of, and fully understand, the policy? Deployment:						1.0	
5.	Has the policy been widely distributed, posted in all work areas, and personally explained by management? Deployment:						1.0	

ORGANIZATION: DATE: CATEGORY: 1.0 Leadership ITEM: 1.1 Senior Executive Leadership		RAT FAC				WEIGHT FACTOR	SCORE
No. QUESTION	0	3	Ю	7	10	(W)	(FxW)
Supplemental: Credit for senior excutive involvement, visibility, and approach (in developing and maintaining an environment for quality excellence) not covered in above questions. Describe specifics. Approach: Deployment: The total points assigned to Item 1.1 is 50 points.						.6 .4	
ITEM SCORE - SUM OF COLUMN (FxW)	[To	tal c	anno	ot ex	ceed	50 1	

ORGANIZATION: DATE: CATEGORY: 1.0 Leadership ITEM: 1.2 Quality Values		RAT FAC		WEIGHT FACTOR	SCORE		
No. QUESTION	0	3	5	7	10	(W)	(FxW)
 Is there evidence to indicate that providing high quality products/services that meet customer requirements is part of the overall mission of the company? Approach: Are concepts such as defect reduction and continuous improvement emphasized by management? Approach: 						.4	
3. Is the company's policy on quality visible in all relevant education/training programs, meetings, and company communications? Deployment:						.4	
4. Is there evidence of a systematic process for evaluating the adoption of the policy's values by employees? Approach:						.4	

ORGANIZATION: DATE: CATEGORY: 1.0 Leadership ITEM: 1.2 Quality Values		RAT FAC		WEIGHT FACTOR	SCORE		
No. QUESTION	0	3	5	7	10	(W)	(FxW)
5. Are recognition programs in existence that reward employees for exhibiting behavior consistent with the quality values of the company? Approach: Supplemental:						.4	
Credit for the company's quality values (how they are projected in a consistent manner, and how adoption of the values throughout the company are determined and reinforced) not covered in above questions. Describe Specifics. Approach: Deployment: The total points assigned to Item 1.2 is 29 points.						.32 .08	
ITEM SCORE - SUM OF COLUMN (FxW)	ITO	tal C	nno	t exi	bees	20 1	

ORGANIZATION: DATE: CATEGORY: 1.0 Leadership ITEM: 1.3 Management for Quality	RATING FACTOR (F)					WEIGHT FACTOR	SCORE
No. QUESTION	0	3	5	7	10	(W)	(FxW)
1. Has management developed and issued a Strategic Quality Management Plan? Approach: 2. Does the Plan define specific short term and long term goals and strategies? Approach: 3. Does the plan include employee involvement and participation in functional and cross-functional teams? Approach: 4. Are management responsibilities and target dates clearly defined for activities? Approach: 5. Does the plan incorporate management control systems to evaluate progress against specific goals and targets? Approach:						3 3 3	

ORGANIZATION: DATE: CATEGORY: 1.0 Leadership ITEM: 1.3 Management for Quality	RATING FACTOR (F)					WEIGHT FACTOR	SCORE
No. QUESTION	0	3	5	7	10	(W)	(FxW)
6. Do job descriptions exist and do they include specific measurable quality goals? Approach: 7. Are systems and procedures that encourage cooperation and teamwork implemented in all areas of the company? Deployment: 8. Do audit plans exist that require routine audits of the technical quality in all areas of the company? Approach: 9. Are the overall audit findings and recommendations evaluated and reviewed by company management? Approach: 10. Is there evidence that the audit findings and recommendations result in continuous improvement actions by management? Approach:						.3	

ORGANIZATION: DATE: CATEGORY: 1.0 Leadership ITEM: 1.3 Management for Quality	RATING FACTOR (F)				WEIGHT FACTOR	SCORE	
No. QUESTION	0	3	5	7	10	(W)	(FxW)
Supplemental: Credit for the quality values (how they are integrated into day-to-day leadership, management, and supervision of all company units) not covered in above questions. Describe specifics. Approach: The total points assigned to Item 1.3 is 30 points.						.6	
ITEM SCORE . SUM OF COLUMN (FxW)	[To	tal c	anno	t ex	beec	30 1	

CATEGORY SUMMARY WORKSHEET

ORGANIZATION: DATE:	SCORE F (FxW) Worksheet)
CATEGORY: 1.0 Leadership	ITEM SCORE SUM OF (FxW) (From Item Worksh
No. ITEM	(1)
1.1 Senior Executive Leadership	
1.2 Quality Values	
1.3 Management for Quality	
CATEGORY SCORE = [SUM Column (I)]	

DAT	E: EGORY: 2.0 Information and Analysis M:2.1 Scope and Management of Data and Information	RATING FACTOR (F)					WEIGHT FACTOR	SCORE
No.	QUESTION	0	3	5	7	10	(W)	(FxW)
1.	Are key reliabilty and quality metrics (from all business areas) used to measure performance and evaluate progress against specific goals and targets?						·	
	Approach:						.2	
2.	Does the data collected provide a historical perspective for trend analysis? Approach:						.2	
3.	Is the data in a suitable form to use in driving corrective actions for defect reduction? Approach:	:					.2	
4.	Is the data reviewed at managment meetings and is there evidence that corrective actions are assigned based upon the data? Approach:						.2	
5.	Is a system in place to adequately communicate the data to all employees so they can follow progress versus goals and measure trends? Approach:						.2	

DAT CAT	E: EGORY: 20 Information and Analysis M:2.1 Scope and Management of Data and Information		RAT FAC		WEIGHT FACTOR	SCORE		
No.	QUESTION	0	3	5	7	10	(W)	(FxW)
6. 7.	Is data collected to measure areas such as cost-of-failure (both internal and external), cost-of-assessment, and cost-of-prevention? Approach: Are there organizational action plans to reduce these costs?						.2	
	Approach:						.2	
8.	Is the data perceived to be accurate by the user and are people using the data for decision making? Approach:						.2	
9.	Is customer failure and field performance data captured and used for corrective action? Approach:						.2	
10.	Are computers used in all business areas to capture, track, and analyze this data? Approach:						.2	·

ORGANIZATION: DATE: CATEGORY: 2.0 Information and Analysis ITEM:2.1 Scope and Management of Data and Information		RAT FAC	TOR	WEIGHT FACTOR	SCORE		
No. QUESTION	0	3	5	7	10	(W)	(FxW)
Credit for the company's base of data and information (how they are used in planning, day-to-day management, and evaluation of quality; and how data and information relaibility, timeliness, and access are assured) not covered in above questions. Describe specifics. Approach: The total points assigned to Item 2.1 is 20 points.						.4	
ITEM SCORE - SUM OF COLUMN (FxW)	To	tal c	anno	t exc	eed	20 1	

DATI CAT	E: EGORY: 2.0 Information and Analysis M: 2.2 Competitive Comparisons and Benchmarks		RAT FAC		WEIGHT FACTOR	SCORE		
No.	QUESTION	0	3	5	7	10	(W)	(FxW)
1. 2.	Is there evidence of a systematic process for selecting competitive organizations for comparison purposes? Approach: Are there clear guidelines for benchmarking and how the collected data is to be used for improvement? Approach: Credit for the company's approach (to selecting quality-related competitive comarisons and world-class benchmarks to support quality planning, evaluation, and improvement) not covered in above questions. Describe specifics. Approach:						1.5	
	total points assigned to Item 2.2 is points.							
17	TEM SCORE - SUM OF COLUMN (FxW)	To	tal c	anno	t exc	beec	30 1	

DAT	E: EGORY: 2.0 Information and Analysis M: 2.3 Analysis of Quality Data and Information		RAT FAC		WEIGHT FACTOR	SCORE		
No.	QUESTION	0	3	5	7	10	(W)	(FxW)
1.	Have costs of quality been calculated and evaluated as a benchmark for business functions? Deployment: Do these costs include prevention and appraisal costs and external and internal failure costs? Approach:						.2	
3.	Is cost of quality regularly reported to, and monitored by, management? Approach:						.2	
4.	Is the cost of quality used as a management tool for monitoring the effectiveness of the quality management system, identifying problem areas, and establishing defect reduction and cost objectives? Approach:						.2	
5.	Is management aware of changes in the cost of quality? Approach:						.2	

DAT CAT	EANIZATION: E: EGORY: 2.0 Information and Analysis M:2.3 Analysis of Quality Data and Information		RAT FAC		WEIGHT FACTOR	SCORE		
No.	QUESTION	0	0 3 5 7 10					(FxW)
6.	Are the effects of the cost of quality on product price or manufacturing cost objectives known? Approach:						.2	
7.	Is there evidence that, if the cost of quality increases for a particular department or function, management follow-up and corrective actions occur? Approach:						.2	
8.	Is there evidence that the impact of changes and countermeasures used to improve key aspects of reliability or quality are evaluated? Approach:						.2	-
9.	Is there evidence that defect reduction projects have resulted in improved cycle time? Approach:						.2	
10.	Is there evidence that the analysis of quality data has resulted in changes and improvements in the types of data collected and in the reliability of data. Approach:						.2	

ORGANIZATION: DATE: CATEGORY: 2.0 Information and Analysis ITEM:2.3 Analysis of Quality Data and Information	RATING FACTOR (F)					WEIGHT FACTOR	SCORE
No. QUESTION	0	3	5	7	10	(W)	(FxW)
Credit for the company's approach (to analyzing data and information to support the company's overall quality objectives) not covered in above questions. Describe specifics. Approach: The total points assigned to Item 2.3 is 20 points.						.4	
ITEM SCORE . SUM OF COLUMN (FXW)	To	tal c	anno	t exe	ceed	20 1	

CATEGORY SUMMARY WORKSHEET

ORGANIZATION: DATE: CATEGORY: 2.0 Information and Analysis	ITEM SCORE SUM OF (FxW) (From Item Worksheet)
No. ITEM	(1)
2.1 Scope and Management of Quality Data and Information	
2.2 Competitive Comparisons and Benchmarks	
2.3 Analysis of Quality Data and Information	
CATEGORY SCORE . [SUM Column (I)]	

DAT	E: EGORY: 3.0 Strategic Planning W: 3.1 Strategic Quality Planning Process	RATING FACTOR (F)					WEIGHT FACTOR	SCORE
No.	QUESTION	0	3	5	7	10	(W)	(FxW)
1.	Does the quality management plan require: Approach: a. Satisfying the customer's requirements and expectations? b. Prevention-based management systems? c. Total management participation? d. Management control systems? e. Continuous quality improvement? f. Customer participation and feedback? g. Competitive benchmarking? Does the management plan require						.5	
	employee involvement and participation in teams (within functions, cross-functional, and with external groups)? Approach:						.5	

ORGANIZATION: DATE: CATEGORY: 3.0 Strategic Planning ITEM: 3.1 Strategic Quality Planning Process		RAT FAC		WEIGHT FACTOR	SCORE		
No. QUESTION	0	3	5	7	10	(W)	(FxW)
 3. Does the management plan include elements for continuous improvement such as: Approach: a. Procedures to update the plan? b. An audit plan? c. Modification of job descriptions and performance reviews to reflect quality improvement objectives and goals? d. Prevention-based design of new products and services? e. Ongoing education requirements? f. Prevention-based problem solving? g. Reducing process variation? 4. Are planning and goal-setting processes systematic, organized, and include all functions in the organization? Approach: 						.5	

ORGANIZATION: DATE: CATEGORY: 3.0 Strategic Planning ITEM: 3.1 Strategic Quality Planning Process		RAT FAC		WEIGHT FACTOR	SCORE		
No. QUESTION	0	3	5	7	10	(W)	(FxW)
 5. Are quality improvement goals, strategies, and issues addressed in the long-term and short-term (annual) strategic quality plan? Approach: Are customer requirements thoroughly identified and used in developing the goals and plans for the organization? Approach: 7. Is benchmarking data utilized as a means of setting goals and standards during the planning cycle? Approach: 						.ss.	

ORGANIZATION: DATE: CATEGORY: 3.0 Strategic Planning ITEM: 3.1 Strategic Quality Planning Process	RATING FACTOR (F)					WEIGHT FACTOR	SCORE
No. QUESTION	0	3	5	7	10	(W)	(FxW)
Credit for the company's strategic quality planning process (how goals for quality leadership and customer satisfaction are developed and included in short and long-term plans) not covered in above questions. Describe specifics. Approach: The total points assigned to Item 3.1 is 35 points.						.7	
ITEM SCORE - SUM OF COLUMN (FxW) (To	tal o	ann	ot ex	ceed	35]	<u> </u>

DAT CAT ITE	E: EGORY: 3.0 Strategic Planning M: 3.2 Quality Goals and Plans	RATING FACTOR (F)					WEIGHT FACTOR	SCORE
No.	QUESTION	0	3	5	7	10	(W)	(FxW)
1. 2. 3.	Are goals identified in the strategic quality plan challenging and written specifically enough to allow one to tell whether or not they have been accomplished? Approach: Are the levels of resources dedicated to the plans realistic? Approach: Is there evidence that the plans are effectively deployed to all appropriate levels of employees and, if appropriate, to suppliers? Deployment: Are expected benefits from quality improvement efforts described, and is there evidence that the described benefits will occur if the quality improvements are met? Approach: Are benchmarking comparisons of projected changes in quality levels used in setting goals and objectives? Approach:						.5 .5	

ORGANIZATION: DATE: CATEGORY: 3.0 Strategic Planning ITEM: 3.2 Quality Goals and Plans			ING TOR	WEIGHT FACTOR	SCORE		
No. QUESTION	0	3	5	7	10	(W)	(FxW)
Credit for the company's goals and strategies (the content of the goals and the strategies for achieving them - for the short and long term) not covered by the above questions. Describe specifics. Approach: Deployment: The total points assigned to Item 3.2 is 25 points.						.4	
ITEM SCORE . SUM OF COLUMN (FxW)	[To	tal c	enno	t exc	bees	25 1	

CATEGORY SUMMARY WORKSHEET

ORGANIZATION: DATE: CATEGORY: 3.0 Strategic Quality Planning	ITEM SCORE SUM OF (FxW) (From Item Worksheet)
No. ITEM	(1)
3.1 Strategic Quality Planning Process	
3.2 Quality Goals and Plans	
CATEGORY SCORE = [SUM Column (I)]	

ORGANIZATION: DATE: CATEGORY: 4.0 Human Resource Utilization ITEM: 4.1 Human Resource Management		RAT FAC	ING TOR	WEIGHT FACTOR	SCORE		
No. QUESTION	0	3	5	7	10	(W)	(FxW)
 Does the management plan address training, experience, and competence needs? Approach: Are quality improvement requirements identified in individual employee goals, and are they held accountable for those improvements? Approach: Is there a system for identifying training needs and methods for providing the proper education, knowledge, and skills? Approach: 						.4	
 4. Does the human resources plan identify strategies to increase individual involvement and effectiveness in the quality improvement process? Approach: 5. Are human resource plans developed as part of the overall strategic planning process for the business? Approach: 						.4	

ORGANIZATION: DATE: CATEGORY: 4.0 Human Resource	RATING FACTOR (F)					WEIGHT FACTOR	SCORE
No. QUESTION	0	3	5	7	10	(W)	(FxW)
Credit for human resource management (how the company's overall human resource management effort supports its quality objectives) not covered by the above questions. Describe specifics. Approach: The total points assigned to Item 4.1 is 20 points.						.8	
ITEM SCORE - SUM OF COLUMN (FxW)	[To	tal c	anno	t ex	ceed	20 1	

DAT CAT	E: EGORY: 4.0 Human Resource Utilization M: 4.2 Employee Involvement		RAT FAC		WEIGHT FACTOR	SCORE		
No.	QUESTION	0	3	5	7	10	(W)	(FxW)
1.	Are processes throughout the company controlled? Deployment:						.4	
2.	Is there a systematic method to authorize process changes? Approach:						.4	
3.	Are employees involved in some quality improvement processes such as suggestion programs, supplier/customer relationships, problem solving teams, and disposition of nonconformances?							·
	Approach:						.4	
4.	Are staff functions evaluated and rated on the level of internal customer satisfaction? Approach:						.4	
5.	Are internal/external customers involved on teams throughout the organization? Deployment:						.4	

DAT CAT	E: EGORY: 4.0 Human Resource Utilization M: 4.2 Employee Involvement	RATING FACTOR (F)					WEIGHT FACTOR	SCORE
No.	QUESTION	0	3	5	7	10	(W)	(FxW)
6.	Is there increased evidence of the use of multi-disciplined teams over the last several years? Approach:						.4	
7.	Is there evidence of a clear plan to increase the empowerment of employees? Approach:						.4	
8.	Have measurement indices been identified for evaluating the effectiveness of employee involvement strategies? Approach:						.4	
9.	Do the employees agree with management about the degree of empowerment they really have? Approach:						.4	
10.	Are there positive trends in: Approach: a. the number of employee suggested improvements?						.4	

ORGANIZATION: DATE: CATEGORY: 4.0 Human Resource Utilization ITEM: 4.2 Employee Involvement	RATING FACTOR (F)					WEIGHT FACTOR	SCORE
No. QUESTION	0	3	5	7	10	(W)	(FxW)
b. the percentage of employees who submit suggestions? c. the acceptance of suggestions and awards distributed that are based upon suggestions? d. the data indicating degree of empowerment? Supplemental: Credit for employee involvement (how the means available for all employees to contribute effectively to meeting the company's quality objectives; review of trends and current levels of involvement) not covered by the above questions. Describe specifics. Approach: The total points assigned to Item 4.2 is 40 points.						.3	
ITEM SCORE - SUM OF COLUMN (FXW) (To	tai c	ann	et ex	ceed	40]	

DAT	E: EGORY: 4.0 Human Resource Utilization M: 4.3 Education and Training	RATING FACTOR (F)					WEIGHT FACTOR	SCORE
No.	QUESTION	0	3	5	7	10	(W)	(FxW)
1.	Are new and transferred employees trained and is the training documented?							
	Approach:						.4	
2.	Is there a program of continued education to enhance or broaden functional skills? Approach:						.4	
3.	Are personnel trained (initial and periodic refresher) on the processes they use? Approach:						.4	
4.	Are quality training needs for all functions and levels of employees, including executives identified?							
	Approach:						.4	
5.	Have supervisors and managers been trained on quality improvement tools and concepts? Approach:						.4	
6.	Are specific training needs for new and existing employees over the next 3-5 years defined? Approach:						.4	

DAT CAT	E: EGORY: 4.0 Human Resource Utilization M: 4.3 Education and Training	RATING FACTOR (F)					WEIGHT FACTOR	SCORE
No.	QUESTION	0	3	5	7	10	(W)	(FxW)
7.	Is there evidence that training/education courses are followed-up with appropriate coaching and reinforcement? Approach:						.4	
8.	Is there a positive trend over the last few years in the resources allocated to this training, the number of employees actually trained, and the number of actual annual training hours per employee versus the goals of the organization? Approach:						.4	
9.	Are employees provided adequate time to practice and master the quality improvement tools/ techniques on the job after formal training is completed? Approach:						.4	
10.	Is there a successful program in existence to reinforce and reward employees' use of these quality improvement took/techniques? Approach:						.4	

ORGANIZATION: DATE: CATEGORY: 4.0 Human Resource Utilization ITEM: 4.3 Education and Training		RAT FAC		WEIGHT FACTOR	SCORE		
No. QUESTION	0	3	5	7	10	(W)	(FxW)
Credit for education and training (how the company decides what quality education and training is needed by employees and how it utilizes the knowledge and skills acquired) not covered by the above questions. Describe specifics. Approach: The total points assigned to Item 4.3 is 40 points.						.8	
ITEM SCORE - SUM OF COLUMN (FxW)	[To	al c	nno	t exc	eed	40]	

ORGANIZATION: DATE: CATEGORY: 4.0 Human Resource Utilization ITEM: 4.4 Employee Recognition and Performance Measurement		RATING FACTOR (F)					SCORE
No. QUESTION	0	3	5	7	10	(W)	(FxW)
 Does the organization recognize employee contributions to reliability and quality improvement through individual and group rewards and recognition?						.5	

ORGANIZATION: DATE: CATEGORY: 4.0 Human Resource Utilization ITEM: 4.4 Employee Recognition and Performance Measurement		RATING FACTOR (F)					SCORE
No. QUESTION	0	3	5	7	10	(W)	(FxW)
5. Are managers and supervisors eligible for, and do they receive, quality recognition awards? Approach: Supplemental:						.5	
Credit for employee recognition and performance measurement (how the company's recognition and performance measurement processes support quality objectives) not covered by the above questions. Describe specifics. Approach:						-5	
The total points assigned to Item 4.4 is 25 points. ITEM SCORE - SUM OF COLUMN (FxW) [To	tal c	anno	ot exc	eed	25]	

DAT CAT ITE	EGORY: 4.0 Human Resource Utilization M: 4.5 Employee Well-Being and Morale						WEIGHT FACTOR	SCORE
No.	QUESTION	0	3	5	7	10	(W)	(FxW)
1.	Are employee well-being and morale factors routinely included in quality improvement activities? Approach: Are employees provided job retraining or rotation to support employee development or to accomodate changes in technology, improved productivity or changes in work processes?						.5	
3.	Approach: Are non-work related special services provided to employees (counseling, recreational, cultural, non-work related education, etc.)?		·				.5	
4.	Approach: Does the company have an active system in place to determine and interprete employee satisfaction levels?						.5	
5.	Approach: Does the company assess and react to trends and levels in key indicators of well-being and morale?						.5	
	Approach:		L				5	

ORGANIZATION: DATE: CATEGORY: 4.0 Human Resource Utilization ITEM: 4.5 Employee Well-Being and Morale	RATING FACTOR (F)					WEIGHT FACTOR	SCORE
No. QUESTION	0	3	5	7	10	(W)	(FxW)
Credit for additional company activities to maintain a work environment conducive to the wellbeing and growth of all employees which are not covered by the above questions. Describe specifics. Approach: The total points assigned to Item 4.5 is 25 points.						.5	
ITEM SCORE . SUM OF COLUMN (FxW)	Tota	al ca	nno	exc	eed	25]	

CATEGORY SUMMARY WORKSHEET

ORGANIZATION:	N) theet)
DATE:	SCORE F (Fx) Works
CATEGORY: 4.0 Human Resource Utilization	ITEM S SUM OF (From Item
No. ITEM	(1)
4.1 Human Resource Management	
4.2 Employee Involvement	
4.3 Education and Training	
4.4 Employee Recognition and Performance Measurement	
4.5 Employee Well-Being and Morale	
CATEGORY SCORE = [SUM Column (i)]	

DAT CAT	E: EGORY: 5.0 Assurance of Quality Products and Services M: 5.1 Design and Introduction of Quality Products and Services QUESTION	RATING FACTOR (F)					S WEIGHT FACTOR	SCORE (FxW)
 	GOLOTION			dash	7		***/	,
1. 2. 3.	Do policies and procedures exist that define the development of new products and services, and do they result in clearly defined project plans with appropriate measurables and reviews? Approach: Is benchmarking used to evaluate new products and services in comparison to best-in-class? Approach: Is there a process to fully define, document, and translate into design						.5	
	parameters all customer satisfaction requirements which are based upon customer inputs?							
	Approach:						.2	
	Deployment:						.3	
4.	Are key parameters of critical processes used to produce new products, fully quantified and qualified before production volumes are produced? Approach:						.5	

DAT CAT ITE	E: EGORY: 5.0 Assurance of Quality Products and Services M: 5.1 Design and Introduction of Quality Products and Services	RATING FACTOR (F)					S WEIGHT FACTOR	SCORE
No.	QUESTION	0 3 5 7 10						(FxW)
5.	Is there evidence that prevention based design tools are used to influence the design? Approach:						.5	
6.	Are new manufacturing processes developed concurrently with the design and are they controlled to ensure consistent reproducibility? Approach:						.5	
7.	Are design reviews conducted on a scheduled basis and do they properly address the process capability indices of critical characteristics?							
	Approach: Deployment:						.2	

ORGANIZATION: DATE: CATEGORY: 5.0 Assurance of Quality Products and Services ITEM: 5.1 Design and Introduction of Quality Products and Services	RATING FACTOR (F)					WEIGHT FACTOR	SCORE
No. QUESTION	0	3	5	7	10	(W)	(FxW)
Supplemental: Credit for Design and Introduction of Quality Products and Services (how new and/or improved products and services are designed and introduced and how processes are designed to meet key product and service quality requirements) not covered in the above questions. Describe specifics. Approach: Deployment: The total points assigned to Item 5.1 is 35 points.						.5	
ITEM SCORE - SUM OF COLUMN (FxW)	[Tot	tal c	anno	t ex	eed	35 1	

DAT CAT	EANIZATION: E: EGORY: 5.0 Assurance of Quality Products and Services M: 5.2 Process Quality Control QUESTION	0	RAT FAC		S WEIGHT FACTOR	SCORE (FxW)	
1. 2. 3.	Are processes within the design and manufacturing areas controlled, and have actions taken place to streamline and reduce cycle time of the processes? Approach: Deployment: Is the approach in design and manufacturing focused on defect prevention rather than defect detection? Approach: Deployment: Are control mechanisms used to ensure that processes stay within specified tolerances or guidelines? Approach: Deployment: Do procedures exist, and are they used, to verify that corrective measures or actions produce the desired effects?					.2 .3 .2 .3	
	Approach:					.2	
,	Deployment:					.3	

ORGANIZATION: DATE: CATEGORY: 5.0 Assurance of Quality Products and Services ITEM: 5.2 Process Quality Control	RATING FACTOR (F)					WEIGHT FACTOR	SCORE
No. QUESTION	0	3	5	7	10	(W)	(FxW)
Credit for Process Quality Control (how the processes used to produce the company's products and services are controlled) not covered in the above questions. Describe specifics. Approach: Deployment: The total points assigned to Item 5.2 is 20 points.						.15 .25	
ITEM SCORE - SUM OF COLUMN (FxW)	To	tal c	anno	t ex	eed	20]	

DAT	E: EGORY: 5.0 Assurance of Quality Products and Services M: 5.3 Continuous Improvement of Processes	RATING FACTOR (F)					WEIGHT FACTOR	score
No.	QUESTION	0	3	5	7	10	(W)	(FxW)
1. 2. 3.	Are design and manufacturing processes periodically reviewed and are there provisions for continuous improvement? Approach: Deployment: Are process changes communicated to the employees and supervisors who actually operate the processes? Approach: Deployment: Is data used to continuously improve processes? Approach:						.15 .25	·
	Deployment:						.25	
4.	Is benchmark data used as a stimuli for identifying opportunities for continuous improvement of processes? Approach: Deployment:						.15 .25	

ORGANIZATION: DATE: CATEGORY: 5.0 Assurance of Quality Products and Services ITEM: 5.3 Continuous Improvement of Processes	RATING FACTOR (F)					WEIGHT FACTOR	SCORE
No. QUESTION	0	3	5	7	10	(W)	(FxW)
5. Is there evidence that continuous improvement is a primary philosophy used throughout the organization? Approach: Supplemental: Credit for Continuous Improvement of Processes (how processes used to produce products and services are continuously improved) not covered in the above questions. Describe specifics. Approach: Deployment:						.4 .15 .25	
20 points.							
ITEM SCORE - SUM OF COLUMN (FxW)	To	tal c	anno	t ex	ceed	20]	

ORGANIZATION: DATE: CATEGORY: 5.0 Assurance of Quality Products and Services ITEM: 5.4 Quality Assessment	RATING FACTOR (F)					WEIGHT FACTOR	SCORE
No. QUESTION	0	3	5	7	10	(W)	(FxW)
 Are periodic, routine audits conducted (throughout the design and manufacturing cycle) by appropriate functional management elements to ensure technical adequacy of the design and manufacturing processes in meeting the customer requirements? Approach: Deployment: Is there evidence of timely corrective actions being implemented as a result of the audits?						.2 .3 .2 .3	

ORGANIZATION: DATE: CATEGORY: 5.0 Assurance of Quality Products and Services ITEM: 5.4 Quality Assessment	RATING FACTOR (F)					WEIGHT FACTOR	SCORE
No. QUESTION	0	3	5	7	10	(W)	(FxW)
Credit for Quality Assessment (how the company assesses the quality of its systems, processes, practices, products, and services) not covered in the above questions. Describe specifics. Approach: Deployment: The total points assigned to Item 5.4 is 15 points.						.1	
ITEM SCORE - SUM OF COLUMN (FxW)	Tot	al ca	nno	t exc	eed	15]	

DAT CAT ITE	EGORY: 5.0 Assurance of Quality Products and Services M: 5.5 Documentation		RAT FAC		WEIGHT FACTOR	SCORE		
No.	QUESTION	0	3	5	7	10	(W)	(FxW)
1. 2.	Is there a plan that provides for the proper identification, distribution, collection, retention, and maintenance of quality related documents and data? Approach: Is there a systematic process for analyzing changes and updating documentation to reflect the current status of equipment, facilities, products, and services? Approach:						.5	
The	Credit for Documentation (How knowledge preservation and transfer are used to support quality assurance, quality assessment, and quality improvement) not covered in the above questions. Describe specifics. Approach:						.2	
17	TEM SCORE - SUM OF COLUMN (FXW)	To	tal c	anno	t ex	ceed	10 }	

DAT CAT	E: EGORY: 5.0 Assurance of Quality Products and Services M: 5.6 Business Process and Support Service Quality	RATING FACTOR (F)					WEIGHT FACTOR	SCORE
No.	QUESTION	0	3	5	7	10	(W)	(FxW)
1. 2.	Has analysis been accomplished to identify internal customer requirements and expectations? Deployment: Have standards and measures been developed based upon internal customer requirements? Approach: Deployment:						.4 .15 .25	
3.	Are procedures and mechanisms in place to control key variables associated with quality? Approach:						.4	
4.	Are there procedures in place to ensure that internal customer requirements are considered during reviews and updates of internal processes? Approach:						.15	
	Deployment:						.25	

ORGANIZATION: DATE: CATEGORY: 5.0 Assurance of Quality Products and Services ITEM: 5.6 Business Process and Support Service Quality	RATING FACTOR (F)					WEIGHT FACTOR	SCORE
No. QUESTION	0	3	5	7	10	(W)	(FxW)
5. Is there evidence that review of internal customer requirements have resulted in process improvements? Approach:						.4	
Credit for Business Process and Support Service Quality (how quality assurance, quality assessment, and quality improvement activities of various functions support the primary processes through which products and services are produced and delivered) not covered in the above questions. Describe specifics. Approach: Deployment: The total points assigned to Item 5.6 is 20 points.						.15 .25	
ITEM SCORE - SUM OF COLUMN (FxW)	[To	tal c	anno	t ex	ceed	20]	

DAT	E: EGORY: 5.0 Assurance of Quality Products and Services M: 5.7 Supplier Quality		RAT FAC		WEIGHT FACTOR	SCORE		
No.	QUESTION	0	3	5	7	10	(W)	(FxW)
1.	Is there a supplier certification process in existence that is based upon customer satisfaction and continuous improvement?							
	Approach:						.3	
2.	Is there a process for establishing supplier requirements and are they clearly defined, communicated, and updated to ensure that the supplier understands expectations?							
	Approach:						.15	
	Deployment:						.25	
3.	Is participation evident in the supplier's process to fully define and translate into design parameters all customer satisfaction requirements?							
	Approach:						.15	
	Deployment:						.25	
4.	Does a system exist to measure supplier performance?							
	Approach:						.3	

CAT ITE	E: EGORY: 5.0 Assurance of Quality Products and Services M: 5.7 Supplier Quality		RAT FAC		WEIGHT FACTOR	SCORE		
No.	QUESTION	0	3	5	7	10	(W)	(FxW)
5. 6.	Have the supplier's process capabilities been assessed and considered in the establishment of customer requirements? Approach: Does a program exist to provide supplier training? Approach:						. 3	
Sup	plemental:							
	Credit for Supplier Quality (how the quality of materials, components, and services furnished by other businesses is assured, assessed, and improved) not covered in the above questions. Describe specifics.							
	Approach:						.15	
	Deployment:				·		.25	
The 20 p	total points assigned to Item 5.7 is oints.							
17	TEM SCORE - SUM OF COLUMN (FxW)	[To	tai c	anno	t ex	beec	20 1	

CATEGORY SUMMARY WORKSHEET

ORGANIZATION:	v)
DATE: CATEGORY: 5.0 Assurance of Quality Products and Services	ITEM SCORE SUM OF (FxW (From Item Works
No. ITEM	(1)
5.1 Design and Introduction of Quality Products and Services	
5.2 Process Quality Control	
5.3 Continuous Improvement of Processes	
5.4 Quality Assessment	
5.5 Documentation	
5.6 Business Process and Support Service Quality	
5.7 Supplier Quality	
·	
CATEGORY SCORE - [SUM Column (I)]	

DAT	EANIZATION: E: EGORY: 6.0 Results M:6.1 Product and Service Quality Results	RATING FACTOR (F)					WEIGHT FACTOR	SCORE
No.	QUESTION	0	3	5	7	10	(W)	(FxW)
1.	Is quality related data collected on all important indices, rather than "just a few?" Results:						1.5	
2.	Do the metrics analyzed include inputs, processes, and outputs, and not just outputs alone? Results:						1.5	
3.	Does the data presented show continuous improvement? Results:						1.5	
4.	Is there evidence that when adverse trends occur, causal factors are determined and corrected? (Level of performance after adverse trend should reflect the change) Results:						1.5	
5.	Are indices compared to competitors and world-class leaders? Results:						1.5	
6.	Do trends in the data reflect that quality is gaining on, or has achieved world-class status? Results:						1.5	

ORGANIZATION: DATE: CATEGORY: 6.0 Results ITEM:6.1 Product and Service Quality Results	RATING FACTOR (F)					WEIGHT FACTOR	SCORE
No. QUESTION	0	3	5	7	10	(W)	(FxW)
Credit for trends in Product and Service Quality Results not cover J in above questions. Describe specifics. Results: The total points assigned to Item 6.1 is 90 points.						1.8	
ITEM SCORE - SUM OF COLUMN (FxW)	To	al ca	nno	t exc	eed	90 1	

DAT CAT	E: EGORY: 6.0 Results M:6.2 Business Process, Operational, Support Service Quality Result	and s	RATING FACTOR (F)					SCORE
No.	QUESTION	0	3	5	7	10	(W)	(FxW)
1.	Does process quality data show little variability, and does it consistently meet or exceed standards set? Results: Is process quality data collected and analyzed on important process						1.0	
	parameters? Results:						1.0	
3.	Have data collection instruments been properly calibrated, and have data collection methods been verified? Results:						1.0	•
4.	Have corrective actions solved the root cause of problems and prevented recurrence? Results:						1.0	
5.	Have adverse trends in the process quality data been fully explained and understood? Results:	ŧ					1.0	

ORGANIZATION: DATE: CATEGORY: 6.0 Results ITEM: 6.2 Business Process, Operational, and Support Service Quality Results	RATING FACTOR (F)					WEIGHT FACTOR	SCORE
No. QUESTION	0	3	5	7	10	(W)	(FxW)
Credit for trends in quality improvement and current quality levels for business processes, operations, and support services not covered in above questions. Describe specifics. Results:						1.0	
ITEM SCORE - SUM OF COLUMN (FxW)	Tot	al ca	nno	t exc	eed	50 1	

ORGANIZATION: DATE: CATEGORY: 6.0 Results ITEM:6.3 Supplier Quality Results			RATING FACTOR (F)					SCORE
No.	QUESTION	0	3	5	7	10	(W)	(FxW)
1. 2.	Is defect data collected and analyzed for suppliers? Results: Is supplier "customer satisfaction data" used as a main source						1.0	
	selector? Results:						1.0	
3.	Are the defect levels of suppliers compared to the levels of world-class suppliers?							
	Results:						1.0	
4.	Do trends in the data show continuous improvement by the suppliers? Results:				·		1.0	
Sup	plemental:							
	Credit for trends and levels in quality of suppliers and services furnished by other companies not covered in above questions. Describe specifics. Results:						.8	
The 40 p	total points assigned to Item 6.3 is oints.							
11	TEM SCORE - SUM OF COLUMN (FxW)	[To	tal c	anno	ot ex	beec	40 1	

CATEGORY SUMMARY WORKSHEET

ORGANIZATION: DATE:	SCORE F (FxW) Worksheet)
CATEGORY: 6.0 Results	ITEM SUM OI (From Item
No. ITEM	(1)
6.1 Product and Service Quality Results6.2 Business Process, Operational, and Support Service Quality Results	
6.3 Supplier Quality Results	
CATEGORY SCORE - [SUM Column (I)]	

ORGANIZATION: DATE: CATEGORY: 7.0 Cus ITEM: 7.1 Determining Connections in the content of the co		RATING FACTOR (F)					WEIGHT FACTOR	SCORE
No. QUE	STION	0	3	5	7	10	(W)	(FxW)
1. Is there evidence that used to identify custor requirements, expect features that are to be new or existing produservices? Supplemental: Credit for how the condetermines current a customer requirement expectations which is the above question. specifics. The total points assigned to 30 points.	ations and e included on acts and Approach: ampany and future ats and not covered by Describe Approach:						.6	
ITEM SCORE - SUM	OF COLUMN (FxW)	To	tal c	anno	t ex	eed	30 1	

ORGANIZATION: DATE: CATEGORY: 7.0 Customer Satisfaction ITEM:7.2 Customer Relationship Management			RAT FAC		WEIGHT FACTOR	SCORE		
No.	QUESTION	0	3	5	7	10	(W)	(FxW)
1.	Is there evidence that customers know how and whom to contact with questions, comments, or complaints? Approach: Is there evidence that the customer data collected is acted upon and the product or service is changed to satisfy the customer; are follow-up contacts made to the customers making the comments or complaints? Results:						1	
3. 4.	Do customer contact personnel receive training for handling customer comments and complaints; are there special selection requirements to screen applicants for the selection of customer contact personnel? Results:						1	
•	programs for customer contact personnel? Approach: Results:						.4 .6	

ORGANIZATION: DATE: CATEGORY: 7.0 Customer Satisfaction ITEM: 7.2 Customer Relationship Management			ING	WEIGHT FACTOR	SCORE		
No. QUESTION	0	3	5	7	10	(W)	(FxW)
5. Is there evidence that customer complaints are analyzed and acted upon? Results: Supplemental: Credit for Customer Relationship Management (how the company provides effective management of its relationships with its customers and improves those relationships) not covered in the above questions. Describe specifics. Approach: Results:						.3	
ITEM SCORE - SUM OF COLUMN (FXW)	ITo	tal c	anno	ot ex	ceed	50 I	

ORGANIZATION: DATE: CATEGORY: 7.0 Customer Satisfaction ITEM:7.3 Customer Service Standards			RATING FACTOR (F)					SCORE
No.	QUESTION	0	3	5	7	10	(W)	(FxW)
1. 2. 3.	Are customer service standards defined for all important aspects of service? Approach: Have the standards been derived from customer expectations and requirements? Approach: Are the standards specific; can performance be reliably measured? Approach: Results: Is data collected on the standards and fed back to the customer contact personnel for continuous improvement activities? Approach:						.5 .5 .35	

ORGANIZATION: DATE: CATEGORY: 7.0 Customer Satisfaction ITEM:7.3 Customer Service Standards		RAT FAC		WEIGHT FACTOR	score		
No. QUESTION	0	3	5	7	10	(W)	(FxW)
Credit for Customer Service Standards (how the company's standards governing not covered in the above questions. Describe specifics. Approach: Results: The total points assigned to Item 7.3 is 20 points.						.1	
ITEM SCORE . SUM OF COLUMN (FxW)	To	tal c	anno	t ex	ceed	20 1	

ORGANIZATION: DATE: CATEGORY: 7.0 Customer Satisfaction ITEM: 7.4 Commitment to Customers				ING	WEIGHT FACTOR	SCORE		
No.	QUESTION	0	3	5	7	10	(W)	(FxW)
1.	Are repair policy and practices compared to competitor's and world-class organizations? Approach:						.5	
2.	Is there evidence that repair data is used to improve the product or service to the customer?							
	Results:						.5	
3.	Are there trends to show continuous reduction in the number of repair claims processed and in the cost of the repairs over the past few years? Results:						5	
Sup	plemental:							
	Credit for Commitment to Customers not covered in the above questions. Describe specifics.							
	Approach:						.1	
	Results:						.2	
The 15 p	total points assigned to Item 7.4 is oints.							
1	TEM SCORE - SUM OF COLUMN (FxW)	[To	tal c	anno	t exc	eed	15 l	

ORGANIZATION: DATE: CATEGORY: 7.0 Customer Satisfaction ITEM: 7.5 Complaint Resolution for Quality Improvement	RATING FACTOR (F)				WEIGHT FACTOR	SCORE	
No. QUESTION	0	3	5	7	10	(W)	(FxW)
 Is there evidence that customer comments and complaints are fed back to the cognizant individuals in a timely fashion; is the data used for continuous improvement of processes, products, or services? Results: 2. Is there a process for handling customer comments and complaints; does it include analyzing the causes of the complaints; does it provide for continuous improvement in the process cycle time and reduction of red tape?" Approach: Results: 3. Is there evidence that analysis of the data is used to implement preventative and corrective actions that result in elimination of the complaint? Results: 						.8	

ORGANIZATION: DATE: CATEGORY: 7.0 Customer Satisfaction ITEM: 7.5 Complaint Resolution for Quality Improvement		RAT FAC		WEIGHT FACTOR	SCORE		
No. QUESTION	0	3	5	7	10	(W)	(FxW)
Credit for Complaint Resolution for Quality Improvement (how the company handles complaints, resolves them, and uses complaint information for quality improvement) not covered in the above questions. Describe specifics. Approach: Results:						.15 .35	
ITEM SCORE - SUM OF COLUMN (FxW)	[Tot	al ca	nno	t exc	eed	25 1	

DAT CAT	E: EGORY: 7.0 Customer Satisfaction M:7.6 Determining Customer Satisfaction		RAT FAC	_	WEIGHT FACTOR	SCORE		
No.	QUESTION	0	3	5	7	10	(W)	(FxW)
1. 2. 3.	Have customer segments been identified; do they include segments such as: pilots, navigators, maintenance personnel, supply personnel, project management personnel, various engineering personnel, manufacturing, and contracting personnel? Results: Is customer satisfaction measured; are metrics objective, reliable, and measurable? Approach: Results: Are separate sets of data collected on customer satisfaction for each customer segment? Results: Is customer satisfaction data collected on competitor's products and services? Results:						.4 .15 .25	

ORGANIZATION: DATE: CATEGORY: 7.0 Customer Satisfaction ITEM: 7.6 Determining Customer Satisfaction			ING	WEIGHT FACTOR	SCORE		
No. QUESTION	0	3	5	7	10	(W)	(FxW)
5. Is there evidence that the collection and comparison (to competitors) of customer satisfaction data has resulted in improvements on new and existing products or services? Results: Supplemental: Credit for Determining Customer Satisfaction (what methods the company uses to determine customer satisfaction, how the information is used in quality improvement, and how methods for determining customer satisfaction are improved) not covered in the above questions. Describe specifics. Approach: Results:						.15 .25	
ITEM SCORE - SUM OF COLUMN (FxW) [To	tal c	anno	t exc	eed	20 1	

ORGANIZATION: DATE: CATEGORY: 7.0 Customer Satisfaction ITEM:7.7 Customer Satisfaction Results	RATING FACTOR (F)				WEIGHT FACTOR	SCORE	
No. QUESTION	0	3	5	7	10	(W)	(FxW)
1. Is there evidence of trends showing continuous improvement in measures of customer satisfaction for each of the various customer segments over the past few years? Results: Supplemental: Credit for trends in Customer Satisfaction Results not covered in the above questions. Describe specifics. Results:						1.4	
ITEM SCORE - SUM OF COLUMN (FxW) [Total cannot exceed 70]							

CERTIFICATION and AUDIT WORKSHEET

ORGANIZATION: DATE: TEAM LEADER:	EGORY SCORE OM CATEGORY RY WORKSHEET)	TOTAL POSSIBLE CATEGORY SCORE	ERCENT POSSIBLE SCORE ACHIEVED
·	CATEGO (FROM SUMMARY	TOT	PERCENT
No. CATEGORY	(S)	(P)	(S/P)x100
1.0 Leadership		100	
2.0 Information and Analysis		70	
3.0 Strategic Quality Planning		60	
4.0 Human Resource Utilization		150	
5.0 Quality Assurance of Products and Services		140	
6.0 Quality Results		180	
7.0 Customer Satisfaction		300	
TOTAL SCORE = SUM OF COLUMN (S)			

CATEGORY SUMMARY WORKSHEET

ORGANIZATION: DATE: CATEGORY: 7.0 Customer Satisfaction	ITEM SCORE SUM OF (FxW) (From Item Worksheet)
No. ITEM	(1)
7.1 Determining Customer Requirements and Expectations	
7.2 Customer Relationship Management	
7.3 Customer Service Standards	
7.4 Commitment to Customers	
7.5 Complaint Resolution for Quality Improvement	
7.6 Determining Customer Satisfaction	
7.7 Customer Satisfaction Results	
7.8 Customer Satisfaction Comparison	
CATEGORY SCORE = [SUM Column (I)]	

ORGANIZATION: DATE: CATEGORY: 7.0 Customer Satisfaction ITEM: 7.8 Customer Satisfaction Comparison	RATING FACTOR (F)					WEIGHT FACTOR	SCORE
No. QUESTION	0	3	5	7	10	(W)	(FxW)
Supplemental: Credit for Customer Satisfaction Comparison (how the company's customer satisfaction compares to competitors) not covered in the above questions. Describe specifics. Results: The total points assigned to Item 7.8 is 70 points.						.7	
ITEM SCORE - SU TO COLUMN (FxW) [Total cannot exceed 70]							

DAT CAT	E: EGORY: 7.0 Customer Satisfaction M:7.8 Customer Satisfaction Comparison	RATING FACTOR (F)				WEIGHT FACTOR	SCORE	
No.	QUESTION	0	3	5	7	10	(W)	(FxW)
1.	Are comparisons of customer satisfaction made among the various customer segments? Results: Is there evidence to show that customer satisfaction levels have continuously improved over the past few years? Results:						1.75	
4.	Is there evidence that customer satisfaction data is used in the strategic management and quality planning process to chart a course to becoming world-class? Results: Is there evidence that decisions made based upon customer satisfaction data have resulted in progress towards becoming world-class? Results:						1.75	

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MISSION

OF

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MANAGEMENT CONTROL CON